

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-333967

(43)Date of publication of application : 18.12.1998

(51)Int.Cl. G06F 12/00

G06F 9/445

G06F 13/00

(21)Application number : 09-345211 (71)Applicant : CASIO COMPUT CO LTD

(22)Date of filing : 15.12.1997 (72)Inventor : SUZUKI HIDEO

(30)Priority

Priority number : 09 85281

Priority date : 03.04.1997

Priority country : JP

(54) NETWORK TERMINAL EQUIPMENT AND RECORDING MEDIUM

(57)Abstract:

PROBLEM TO BE SOLVED: To make it unnecessary for a user to download a required file from a host device in each processing.

SOLUTION: At the time of starting a certain network terminal equipment 200, a computer main body 202 transmits a download request based on user identification(ID) information inherent in each user to a host device 300 on a network 100 through a communication interface 216. In accordance with the download request, the host device 300 selects a

specified file previously loaded down and set up by a user table out of various files corresponding to the user identified by the user ID information from a user-sorted management file for storing various files corresponding to each user and transfers the selected file to the requesting network terminal equipment 200. The specified file is a data file used lately.

LEGAL STATUS [Date of request for examination] 26.02.2003

[Date of sending the examiner's decision of rejection] 31.10.2006

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

*** NOTICES ***

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The predetermined host equipment which memorized multiple files corresponding to two or more user ID information is a network terminal unit by which communication link connection is made through a communication line. A notice means to notify the user ID information which identifies a user through the above-mentioned communication line to the above-mentioned host equipment, A receiving means to receive transmission of the file extracted at the above-mentioned host equipment side based on the above-mentioned user ID

information according to the above-mentioned notice through the above-mentioned communication line, The network terminal unit characterized by providing a storage control means to control that archival memory of the file which was transmitted from the above-mentioned host equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned.

[Claim 2] The above-mentioned notice means is a network terminal unit including a means to notify the above-mentioned user ID information to the above-mentioned host equipment at the time of starting starting of the network terminal unit concerned according to claim 1.

[Claim 3] The above-mentioned receiving means is a network terminal unit including a means to receive transmission of the file extracted out of the multiple files specified as the above-mentioned host equipment side for the above-mentioned user ID information according to claim 1.

[Claim 4] Predetermined host equipment is a network terminal unit by which communication link connection is made through a communication line. A means of operation to operate the network terminal unit concerned by the starting command from the timer starting means provided to the network terminal unit concerned or the above-mentioned host equipment, A receiving means to receive transmission of the file set up beforehand through the above-mentioned communication line from the above-mentioned host equipment side, A storage control means to control that archival memory of the file which was transmitted from the above-mentioned host equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned, The network terminal unit characterized by providing the means for stopping which stops actuation of the network terminal unit concerned by termination of processing of a single string of the archival memory of the transmitting file by the above-mentioned storage control means.

[Claim 5] The above-mentioned receiving means is a network terminal unit including a means to receive transmission of the file extracted at the above-mentioned host equipment side out of the multiple files corresponding to the user ID information using the network terminal unit concerned according to claim 3.

[Claim 6] the time check which predetermined host equipment is a network terminal unit by which communication link connection is made through a communication line, and clocks current time -- with a means A demand means to require transmission of a new file from the above-mentioned host equipment through the above-mentioned communication line, A receiving means to receive transmission of the file extracted from the above-mentioned host equipment side corresponding to current time through the above-mentioned communication line, The network terminal unit characterized by providing a storage control means to control that archival memory of the file which was transmitted from the above-mentioned host

equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned.

[Claim 7] The network terminal unit according to claim 5 which possesses further a storage means classified by time zone to memorize the file designation information for specifying the file which should be carried out archival memory as the network terminal unit concerned in each of that time zone according to two or more time zones, and a notice means to notify the file designation information corresponding to the time zone corresponding to current time to the above-mentioned host equipment.

[Claim 8] The above-mentioned storage means classified by time zone is the network terminal unit according to claim 5 which possesses further a deletion means to delete the file which became unnecessary including a means to memorize the file designation information for specifying the file which becomes unnecessary, in each time zone from the above-mentioned storage means.

[Claim 9] The program code which can perform the computer for making the user ID information which is the storage which stored the program which can perform a computer and identifies a user notify through a communication line to host equipment, The program code which can perform the computer for making transmission of the file extracted at the above-mentioned host equipment side based on the above-mentioned user ID information according to the above-mentioned notice receive through the above-mentioned communication line, The storage characterized by storing the program containing the program code which can perform the computer for carrying out archival memory of the file which was transmitted from the above-mentioned host equipment and received through the above-mentioned communication line to a storage means.

[Claim 10] The program code which can perform the computer for being the storage which stored the program which can perform a computer and making current time clock, The program code which can perform the computer for making transmission of a new file require from the above-mentioned host equipment through the above-mentioned communication line, The program code which can perform the computer for making transmission of the file extracted from the above-mentioned host equipment side corresponding to current time receive through the above-mentioned communication line, The program code which can perform the computer for making it control that archival memory of the file which was transmitted from the above-mentioned host equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned, The storage characterized by storing a ***** program.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the record medium which the computer which stored the program including the instruction which makes a computer perform actuation of the network terminal unit in the network system with which host equipment and a network terminal unit are connected on a network, and such a network system, and host equipment can read.

[0002]

[Description of the Prior Art] In recent years, a personal computer (PC) is connected to networks, such as a Local Area Network (LAN), and intranet, the Internet, and information is shared or delivering and receiving mutually is performed increasingly.

[0003] It cannot be said as what has PC cheap as a terminal unit connected to such a network, but it is transmitting and (download) using only the information (an application program file and data file) required by the way which is recent years and the need from host equipments, such as a server on a network, there, simplification of resources, such as a hard disk, is attained, and the network PC made cheap tends to begin to be used.

[0004]

[Problem(s) to be Solved by the Invention] However, by the time it changed into the condition that they must be downloaded every day and a user can process though the user used the same application file and the same data file every day since it had become the gestalt which downloads an application file and a data file required in such a network PC whenever it is needed suitably, the very troublesome activity was required.

[0005] The technical problem of this invention is doing unnecessary the activity to which a user's downloads a need file from host equipment each time. It is doing unnecessary the activity a user's setting up which file another technical problem of this invention downloading.

[0006] Still more nearly another technical problem of this invention is enabling it to process immediately after network terminal unit starting. Other technical problems of this invention are enabling it to use it certainly in the time zone which needs the data file or application to need. Another technical problem of this invention is making it access to a data file also become possible immediately.

[0007]

[Means for Solving the Problem] The means of invention of claim 1 is as follows. The predetermined host equipment which memorized multiple files corresponding to two or more user ID information is a network terminal unit by which communication link connection is made through a communication line. A notice means to notify the user ID information which

identifies a user through the above-mentioned communication line to the above-mentioned host equipment, A receiving means to receive transmission of the file extracted at the above-mentioned host equipment side based on the above-mentioned user ID information according to the above-mentioned notice through the above-mentioned communication line, It is characterized by providing a storage control means to control that archival memory of the file which was transmitted from the above-mentioned host equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned.

[0008] The means of invention of claim 4 is as follows. Predetermined host equipment is a network terminal unit by which communication link connection is made through a communication line. A means of operation to operate the network terminal unit concerned by the starting command from the timer starting means provided to the network terminal unit concerned or the above-mentioned host equipment, A receiving means to receive transmission of the file set up beforehand through the above-mentioned communication line from the above-mentioned host equipment side, A storage control means to control that archival memory of the file which was transmitted from the above-mentioned host equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned, It is characterized by providing the means for stopping which stops actuation of the network terminal unit concerned by termination of processing of a single string of the archival memory of the transmitting file by the above-mentioned storage control means.

[0009] The means of invention of claim 6 is as follows. the time check which predetermined host equipment is a network terminal unit by which communication link connection is made through a communication line, and clocks current time -- with a means A demand means to require transmission of a new file from the above-mentioned host equipment through the above-mentioned communication line, A receiving means to receive transmission of the file extracted from the above-mentioned host equipment side corresponding to current time through the above-mentioned communication line, It is characterized by providing a storage control means to control that archival memory of the file which was transmitted from the above-mentioned host equipment and received by the above-mentioned receiving means through the above-mentioned communication line should be carried out to the storage means in the data processor concerned.

[0010]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained with reference to (A) thru/or drawing 7 of drawing 1 . (A) of drawing 1 is drawing showing the configuration of the 1st of the network system of the gestalt of operation of this invention, and two or more network terminal units 200 are connected with the server 300 as host equipment through the network 100.

[0011] Here, each terminal unit 200 is a network personal computer (PC), for example, is the thing of a configuration as shown in (B) of drawing 1 . That is, in this drawing, a reference number 202 is a body of a computer which controls the whole. 204 is input units, such as a keyboard and a mouse, 206 is displays, such as CRT, and 208 is airline printers, such as a printer. 210 is storage, such as a hard disk (HD) which memorizes information, such as a program of the instrument identification information for identifying an operating system (OS) and the terminal unit concerned, various application files and a data file, and initial download processing that is mentioned later.

[0012] Here, it has internal-memory 202A for using the above-mentioned body 202 of a computer as work-piece memory at the time of executing the program memorized by this storage 210, and the above-mentioned program and the information on other are developed by this internal-memory 202A.

[0013] In addition, a not much mass thing is not used as storage 210. Only therefore, information, such as OS and download processing, among the information memorized by the above-mentioned storage 210 What is memorized by the portable mold record media 212, such as a floppy disk (FD) and CD-ROM, is read with the record-medium driving gear 214. Or it is supplied from the server 300 on a network 100 through a communication interface 216, and is stored beforehand, and other application files and data files are downloaded from a server 300 if needed, and are memorized.

[0014] On the other hand, as a store, a mass thing is used and, as for the server 300, a user table, the management file classified by user, a common management file, various application files, etc. are saved there. Moreover, programs, such as OS and processing according to the download demand from each terminal unit 200, etc. were beforehand read from storage or a portable mold record medium, and are memorized. About other configurations, it is the same as that of a terminal unit 200.

[0015] (C) of drawing 1 is drawing showing the user table constituted by the server 300, it makes this table correspond to user-identification information, such as a password, and it memorizes the download setting existence flag which shows whether the data file concerned set as arbitration by the user from a terminal unit 200 side is downloaded while the rewriting storage of the information the user concerned indicates the data file (for example, ten pieces) used recently to be is carried out suitably.

[0016] Moreover, management file area was set up for every user, and the user management file similarly constituted by the server 300 has memorized individual information, such as a stereo of the data file which each user used, e-mail information, and schedule information, as shown in (D) of drawing 1 .

[0017] Next, the actuation in such a configuration is explained. Drawing 2 is the flow chart of the initial download processing performed with the body 202 of a computer of the network terminal unit 200, and drawing 3 shows the operation flow chart of the server 300 according

to this.

[0018] That is, if the power source of the network terminal unit 200 concerned is turned on, first, OS will be started (step S201) and an initial screen will be displayed on a display (step S202). And it becomes the input waiting of user-identification information, such as a password by the input unit 204, (step S203).

[0019] If user-identification information is inputted next, the download demand including the instrument identification information on the terminal unit 200 concerned memorized to the user-identification information and storage 210 will be transmitted to a server 300 by the communication interface 216 (step S204), and it will become the response waiting from a server (step S205).

[0020] In a server 300, if the download demand from this terminal unit 200 is received (step S301), the existence of user-identification information is checked first (step S302), and if it is, in register with a user table, it will distinguish whether shifts and agrees in that User Information (step S303). And if it is registered User Information, the terminal unit 200 which had the demand based on instrument identification information will be specified, and an enabling signal will be transmitted to the terminal unit 200 (step S304).

[0021] In a terminal unit 200, if a response is received from a server 300 through a communication interface 216, it will judge whether it is the above-mentioned enabling signal (step S206). If it is an enabling signal, it will progress to the next processing, but in not being an enabling signal, it finishes this initial download processing. On the other hand, when an enabling signal is obtained next, the existence of a transfer of a data file is distinguished (step S207).

[0022] That is, a server 300 judges whether a download setup is made after an enabling-signal transfer with reference to the existence flag of a download setup of the user correspondence of a user table concerned (step S305). And if the download setup is not made, the processing according to this download demand is ended. On the other hand, when a download setup is made, according to the data file information used recently [of a user table / concerned] corresponding to a user, the data file used recently is read from the management file area about the user concerned of a user management file (step S306), and it transmits to the terminal unit 200 with a demand (step S307).

[0023] If it ** and there is no transfer of a data file at a terminal unit 200 side, this initial download processing will be finished, but if it is, the whole of that transmitted data file is saved at storage 210 (step S208). Then, it judges whether correspondence application required to use those saved data files is memorized by storage 210 (step S209). And when there is correspondence application, this initial download processing is finished. On the other hand, when there is no correspondence application, download of a correspondence application file is required of a server 300 through a communication interface 216 (step S210), and it becomes the waiting for a transfer (step S211).

[0024] It distinguishes the existence of the application transfer request from the terminal unit 200 concerned after transfer termination of a data file (step S308), if there is, it will end the processing according to this download demand, but when it is, a server 300 reads the file of that demand application (step S309), and transmits it to the terminal unit 200 with a demand (step S310). [no] And the processing according to this download demand is ended.

[0025] In a terminal unit 200, if this transmitted correspondence application file is received, it is saved at storage 210. (Step S213) . And if it returns to the above-mentioned step S210 and there is no need when it judges whether there is any need for a transfer of the application corresponding to still more nearly another data file (step S214) and there is need, this initial download processing will be finished.

[0026] As mentioned above, it sets to the network system with which a server 300 and the network terminal unit 200 are connected on a network 100. The download demand by the identification information of a user proper is transmitted to the above-mentioned server 300 at the time of starting starting of the network terminal unit 200. The designated file beforehand specified among the various files of user correspondence of the above-mentioned discernment saved in the server 300 at the server is chosen. Since he is trying to download to the network terminal unit 200 with the above-mentioned demand, if a user has, the time and effort of downloading a need file from a server 300 each time becomes needlessness entirely.

[0027] Moreover, since the data file used recently is selected automatically and downloads in case a data file is downloaded, the activity that a user sets up becomes unnecessary about which data file is downloaded.

[0028] In addition, you may make it save information for a user to specify the application used recently instead of saving information for a user specifying the data file used recently as a user table.

[0029] Since the application used recently is selected automatically and downloads by this in case application is downloaded, the activity that a user sets up becomes unnecessary about which application file is downloaded.

[0030] Next, the gestalt of operation of the 2nd of this invention is explained. (A) of drawing 4 is drawing showing the configuration of the 2nd of the network system of the gestalt of operation of this invention, and two or more network terminal units 200 are connected with the server 300 as host equipment through the network 100 like the gestalt of implementation of the above 1st. The configuration of these terminal units 200 and a server 300 is the same as that of the gestalt of implementation of the above 1st. However, in the gestalt of this operation, the terminal unit 200 has memorized user-identification information, instrument identification information, and a time zone table to the store. Moreover, while clocking, it has the timer for starting the terminal unit 200 concerned at the time of day set up beforehand. The server 300 has memorized the table according to user, the data file, and the application file to the store.

[0031] (B) of drawing 4 is drawing showing the table according to user constituted by the server 300, and the information for specifying the data file and application which made it correspond to user-identification information, and had initial download set up is memorized. In addition, the table according to this user may be constituted in a terminal unit 200 side.

[0032] Moreover, (C) of drawing 4 is drawing showing the time zone table constituted by the terminal unit 200, and it has memorized the information for specifying the application which should be then deleted while it memorizes the information for specifying the time of day which should perform download which the user set as arbitration, respectively, the data file which should be downloaded, and application.

[0033] Hereafter, the actuation in such a configuration is explained. Drawing 5 is the operation flow chart of the terminal unit 200 by timer starting. that is, if it becomes the predetermined time set up beforehand, OS will be started (step S221), the user-identification information and instrument identification information which are memorized by storage will be read (step S222), and the download demand including the information which shows that it is initial starting download, and these information that carried out reading appearance will be transmitted to a server 300 (step S223).

[0034] It is the operation flow chart of a server 300, and if the download demand from a terminal unit 200 is received (step S321), the existence of user-identification information is checked first (step S322), and drawing 6 will distinguish whether the download demand is a thing at the time of initial starting download, if there is (step S323). And if it is the download demand at the time of initial starting download, according to the data file information on an initial download setup corresponding to the user-identification information concerned on the table according to user, a data file will be read from storage (step S324), the terminal unit 200 which had the demand based on instrument identification information will be specified, and the read data file will be transmitted to the terminal unit 200 (step S325).

[0035] The terminal unit 200 is waiting for the transfer of predetermined time and a data file, when there is no data file transfer into the predetermined time, it performs (step S224) and OS termination actuation (step S225), and it ends processing. On the other hand, if a data file transfer is received in predetermined time (step S224), the transfer file is saved at storage (step S225).

[0036] Moreover, after a data file transfer, a server 300 reads an application file from storage according to the application information of an initial download setup corresponding to the user-identification information concerned on the table according to user (step S326), transmits it to the terminal unit 200 with a demand similarly, (step S327), and ends processing.

[0037] A terminal unit 200 progresses to (step S228) and the above-mentioned step S225, when it is waiting for the transfer of predetermined time and an application file after data file preservation and there is no application file transfer into the predetermined time, but if

an application file transfer is received in predetermined time, the transfer application file is saved at storage (step S229). Then, it progresses to the above-mentioned step S225, OS termination actuation is performed, and the processing concerned is ended.

[0038] Next, if it becomes the time amount set as the time zone table as download time of day, interruption will start the body of a computer of a terminal unit 200, and processing as shown in drawing 7 will be performed.

[0039] That is, the user-identification information and instrument identification information which are memorized by storage are read first (step S231), and the information which shows the data file and application corresponding to the time of day concerned which should be downloaded from a time zone table is read further (step S232). and the download demand including the information which shows that it is download according to time zone, and these information that carried out reading appearance is transmitted to a server 300 (step S233).

[0040] When it is judged that a server 300 is not the download demand at the time of initial starting download in the above-mentioned step S323, it distinguishes further whether the download demand which received is a download demand classified by time zone (step S328). And in not being the download demand classified by time zone, it ends processing, but in being the download demand classified by time zone, the demanded data file is read from storage (step S329), and it transmits ** to the terminal unit 200 with a demand (step S330).

[0041] Although a terminal unit 200 ends (step S234) and the processing concerned when it is waiting for the transfer of predetermined time and a data file and there is no data file transfer into the predetermined time, if it receives a data file transfer in predetermined time, the transfer file is saved at the data area of a store (step S235).

[0042] Moreover, after a data file transfer, a server 300 reads the data file used like the gestalt of implementation of the above 1st recently corresponding to the application while reading an application file with a demand from storage (step S331). And the application file and data file which were read to the terminal unit 200 with a demand are transmitted (steps S332 and S333), and the processing concerned is ended.

[0043] Although a terminal unit 200 ends (step S236) and the processing concerned when it is waiting for the transfer of predetermined time and an application file after data file preservation and there is no application file transfer into the predetermined time, if it receives an application file transfer in predetermined time, after securing an availability to storage by deleting the application shown by the deletion application information of a time zone table (step S237), the transfer application file is saved (step S238). Furthermore, the data file used recently corresponding to the application concerned transmitted after it is saved at storage (step S239), and processing is ended.

[0044] As mentioned above, since the data file or application beforehand set up by timer starting was downloaded automatically, when a user actually starts a terminal unit 200, the data file and application to need will be in the condition of having already downloaded, and it

can process immediately after device starting.

[0045] Moreover, since the data file/application used as the candidate for download were set up according to the time zone, only the data file or application needed according to the time zone can be downloaded automatically (for example, although it is unnecessary during the morning, it has the case where he wants to use predetermined application from an afternoon), and it can be certainly used in the time zone which needs the data file or application to need.

[0046] Furthermore, since it was made to download automatically also about the data file used recently corresponding to the application when downloading application automatically, access to a data file also becomes possible immediately.

[0047] Although this invention was explained based on the gestalt of operation above, this invention is not limited to the gestalt of operation mentioned above, and it is needless to say for deformation and application various by within the limits of the summary of this invention to be possible.

[0048] For example, when a timer is supervised to a server 300 side and the starting time of day comes, a terminal unit 200 is turned on through a network 100, and you may make it make it start from a server 300 with the gestalt of implementation of the above 2nd, although it was made to perform timer starting from a terminal unit 200.

[0049] Moreover, although the processing shown in drawing 7 in the phase which download time of day is set as the time zone table, and became the setting time of day was made to perform automatically with the gestalt of implementation of the above 2nd It is distinguishing to which time zone the time of day when it enabled it to advance a download demand at at the time of day for which it asks, and the demand was advanced belonging rather than deciding such download time of day uniquely. An applicable file is read using the file designation information set up to the time zone, and you may make it transmit to a server 300.

[0050] Moreover, when it prepares in a server 300 side and download time of day comes, or when there is a demand from a terminal unit 200, an applicable file is read using the file designation information set up corresponding to the time of day, and you may make it transmit the file to a terminal unit 200, although the above-mentioned time zone table was prepared in the terminal unit 200 side.

[0051]

[Effect of the Invention] Since user ID information is notified to host equipment in the network terminal unit which operates by the network environment through a communication line, the file extracted for the above-mentioned user ID information at the host equipment side is automatically received through a communication line and it was made to memorize host equipment according to invention of claim 1 or claim 9, if a user has, it can work for the user, being able to get a required file immediately.

[0052] If a user has, it becomes unnecessary according to invention of claim 2, to be conscious

of the download from host equipment, since the above-mentioned notice is automatically performed to the above-mentioned host equipment at the time of starting starting of the network terminal unit concerned.

[0053] According to invention of claim 3, it can work, being able to acquire automatically only the file selected carefully out of the file of a large number corresponding to a user. Since timer starting carries out starting actuation of the network terminal unit automatically, auto-receipt of the need file is carried out from host equipment and it was made memorize according to invention of claim 4, if the user sets up the timer starting time of day before the time amount which actually acts, when a user starts a terminal unit and it operates, it will be in the condition that storage preservation of the need file has already been carried out, and it can work immediately.

[0054] According to invention of claim 5, it can work, being able to acquire automatically only the file selected carefully out of the file of a large number corresponding to a user. Since the file corresponding to the time zone is extracted on the basis of current time, the extracted file receives and it made memorize when extracting the file which serves as a candidate for transmitting out of the various files saved at a host equipment side according to invention of claim 6 or claim 10, only the file which is needed according to a time zone can save, and the activity for the file can carry out.

[0055] According to invention of claim 7, since the storage means classified by time zone was prepared, easily, the setup is performed and a setting change can be made. Since the file designation information for specifying the file which becomes unnecessary in each time zone was memorized according to invention of claim 8, the file which became unnecessary can be deleted automatically.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] (A) is drawing in which the block block diagram of the gestalt of operation of the 1st of this invention and (B) show the block block diagram of a network terminal unit, and (C) shows the configuration of a user table, and (D) is drawing showing the configuration of the management file classified by user.

[Drawing 2] It is drawing showing the operation flow chart of the network terminal unit in the gestalt of the 1st operation.

[Drawing 3] It is drawing showing the operation flow chart of the server as host equipment in the gestalt of the 1st operation.

[Drawing 4] It is drawing in which (A) shows the block block diagram of the gestalt of

operation of the 2nd of this invention, and (B) shows the configuration of the table according to user, and (C) is drawing showing the configuration of a time zone table.

[Drawing 5] It is drawing showing the operation flow chart at the time of timer starting of the network terminal unit in the gestalt of the 2nd operation.

[Drawing 6] It is drawing showing the operation flow chart of the server as host equipment in the gestalt of the 2nd operation.

[Drawing 7] It is drawing showing the operation flow chart of the download demand processing classified by time zone of the network terminal unit in the gestalt of the 2nd operation.

[Description of Notations]

100 Network

200 Network Terminal Unit

202 Body of Computer

202A Internal memory

204 Input Unit

206 Display

208 Airline Printer

210 Storage

212 Portable Mold Record Medium

214 Record-Medium Driving Gear

216 Communication Interface

300 Server